OMNI, Jan. '91

EXPLORATIONS

REALITY CHECK:
Cyberthon 1990 gave participants a blitzkrieg peek at the future during 24 hours

The dream comes directly from science fiction: Step into a computer-generated world where anything goes and reality is warped. When the dream fades, though, what's left is a lot more down-to-earth. Black gloves detect movement, dark goggles display an electronic scene, and powerful computers make it all work. Wave your hand and your virtual self moves forward in the counterfeit reality. Move your head and your electronic perspective shifts. From telepresence (the ability to direct machinery from afar) to cyberspace (shared environments that enhance electronic communications), virtual reality jumps across traditional lines of technology as easily as its computer-created objects jump from man-made universes.

The promise of virtual reality (VR) is enormous, potentially affecting everything from business and government to education and entertainment. Much as in the early days of the personal computer revolution, developers and researchers are full of enthusiasm leavened with naive expectations of how fast everything will ultimately come together and who will control the new technology.

All this was in evidence in early October at Cyberthon, a San Francisco-based conference-cum-VR-carnival sponsored by the POINT Foundation, the publisher of *The Whole Earth Catalog*. Quartered in a warehouselike studio with a junkyard as a neighbor, Cyberthon gave participants a blitzkrieg peek at the future during a fast 24 hours.

I was there among the crowds stumbling through the maze and found the future, well, off in the future. Virtual reality may have enough evangelists to stock Sunday morning television, but the technology is actually no more than an infant.

Sense 8, Autodesk, VPL Research, and other firms showed off their virtual reality rigs during Cyberthon. At Autodesk's Cyberspace corner I tugged on a glove and donned a pair of tight-fitting goggles, both wired and cabled to a computer. The view inside the goggles was grainy, like peering too close at a television. The computer graphics that made up Autodesk's virtual world were like children's blocks, all bright colors and sharp angles. When I tilted my head back, the computer read the movement and matched the motion in the electronic room, letting me see the bland sky. A fish coasted by, swimming in the air. Strange, but it fit the *Alice in Wonderland* quality of it all. When I held out my hand and pointed a finger, the sights in my goggles slowly shifted. As I groped for the fish swimming in front of me, my cartoon-like virtual hand looked like Mickey Mouse's, with broad fingers and flat edges. Finally I caught the fish and, raising my real arm, threw it. The virtual fish tumbled out of sight.

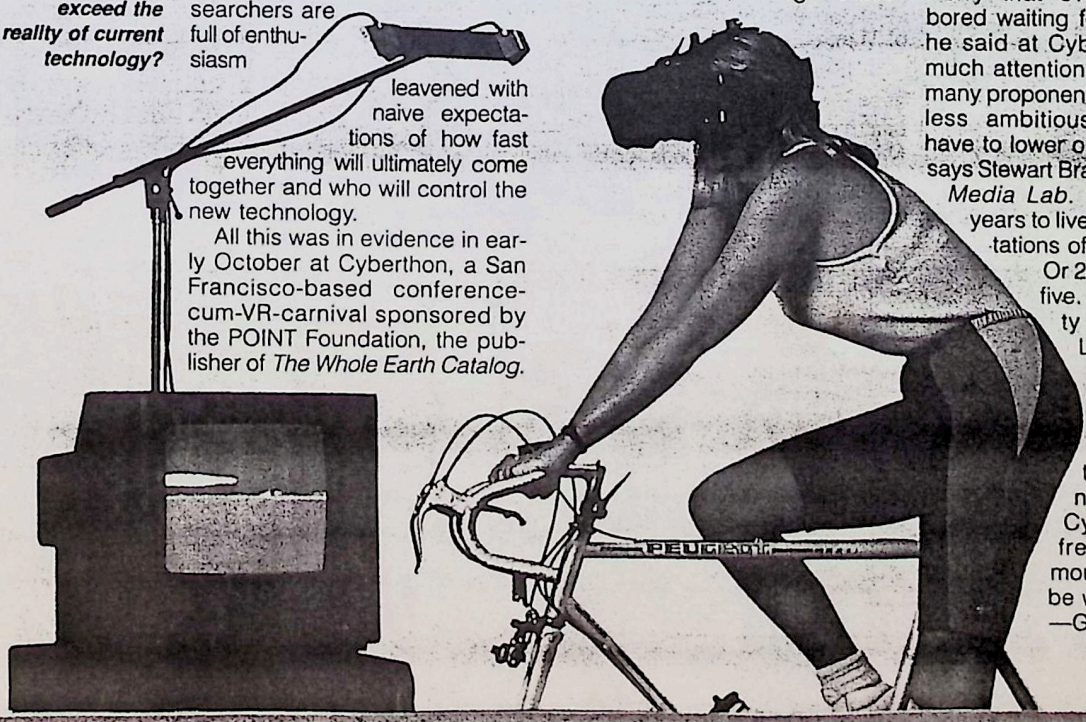
Three hours later the Autodesk rig was down for the count. The computer had been humbled by heat prostration, and VR vanished as quickly as it was created.

That's the state of VR. Its childlike nature makes for interesting moments, some awkward problem solving. ("Walk through that door and you'll get to another room—I think," said one Autodesk aide.) Expectations simply overwhelm reality.

Jaron Lanier, creator of the DataGlove (see Interview, page 44), knows this better than anyone. "I worry that everyone will get bored waiting for virtual reality," he said at Cyberthon. With so much attention focused on VR, many proponents are counseling less ambitious dreams. "We have to lower our expectations," says Stewart Brand, author of *The Media Lab*. "It will take ten years to live up to the expectations of today."

Or 20. Or maybe only five. That's the beauty of technology. Leaps of faith—and engineering—could bring VR to true reality sooner than expected. If not, well, with the Cyberthon taste fresh in my virtual mouth, the wait will be worth it.

—Gregg Keizer



Cyberspace cadets: Products such as Autodesk's Virtual Bicycle Ride will permit users to enter computer-generated worlds. But do expectations exceed the reality of current technology?